CLAIMS

1. A method of treating or preventing Obstructive Sleep Apnea (OSA) including CSA, comprising snoring, sleep apnea and other forms of sleep disordered breathing, that comprises the administration of a pharmacologically effective amount of zonisamide to a patient in need thereof, with the proviso that said snoring, sleep apnea, and sleep disordered breathing caused by external mechanical obstruction of the airways, such as by mucus, is excluded.

2. The method of claim 1, wherein said therapeutically effective dose is effective during a substantial portion of a single sleep period.

3. The method of claim 2, wherein said substantial portion is 50% or more of said sleep period.

4. The method of claim 2, wherein said substantial portion is 80% or more of said sleep period.

5. The method of any of claims 2 to 4, wherein said single sleep period is from one hour to ten hours.

6. The method of any of claims 1 to 5, wherein the administration is peroral.

7. The method of claim 6, wherein the administration is sublingual.

8. The method of any of claims 1 to 5, wherein the administration is topical.

9. The method of claim 6, wherein the administration is confined to the frontal portion of the neck and the breast.

10. The method of claim 6, wherein the therapeutically active dose is released from a composition for controlled release over a period of time extending from 1 hour to 12 hours and more.

11. The method of claim 1, wherein from 50% to 100% of said therapeutically effective dose is released within a period of three hours from administration.

12. The method of claim 1, wherein from 80% to 100% of said therapeutically effective dose is released within a period of five hours from administration.

13. The method of claim 10, wherein said therapeutically effective dose is from 50 to 800 mg.

14. Use of zonisamide for the manufacture of a medicament for treating or preventing Obstructive Sleep Apnea (OSA) including Central Sleep Apnea (CSA), comprising snoring, sleep apnea and other forms of sleep disordered breathing, with the proviso that snoring, sleep apnea or sleep disordered breathing caused by external mechanical obstruction of the airways, such as by mucus, is excluded.

15. The use of claim 14, wherein the medicament is intended for peroral administration.

16. The use of claim 14 or 15, wherein the medicament is designed to release from 50% to 100% of zonisamide within a period of three hours from administration.

17. The use of claim 14 or 15, wherein the medicament is designed to release from 80% to 100% of zonisamide within a period of five hours from administration.

18. The use of any of claims 14 to 17, wherein the medicament is intended for transdermal administration.

19. The use of any of claims 14 to 17, wherein the medicament is intended for transmucosal administration.

20. The use of any of claims 15-17 or 19, wherein the medicament is in form of a sublingual preparation.

21. The use of claim 20, wherein said sublingual preparation is prepared by direct compression.

22. A protective patch comprising zonisamide in an amount therapeutically effective in the treatment of Obstructive Sleep Apnea (OSA) including Central Sleep Apnea (CSA), comprising snoring, sleep apnea and other forms of sleep disordered breathing, and a pharmaceutically acceptable carrier for transdermal or transmucosal administration, with the proviso that snoring, sleep apnea, and sleep disordered breathing caused by external mechanical obstruction of the airways, such as by mucus, is excluded.

23. Use of zonisamide for the manufacture of a diagnostic device, kit or composition for the diagnosis of obstructive sleep apnea including central sleep apnea.

24. The method of any of claims 1 – 13, comprising the administration of one or more additional compounds effective in the treatment of OSA or CSA..

25. The use of any of claims 14 – 21, in combination with one or more additional compounds effective in the treatment of OSA or CSA..

26. The patch of claim 22, comprising one or more additional compounds effective in the treatment of OSA or CSA..

27. The use of claim 23 in combination with one or more additional compounds effective in the treatment of OSA or CSA.

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